

INCH-POUND

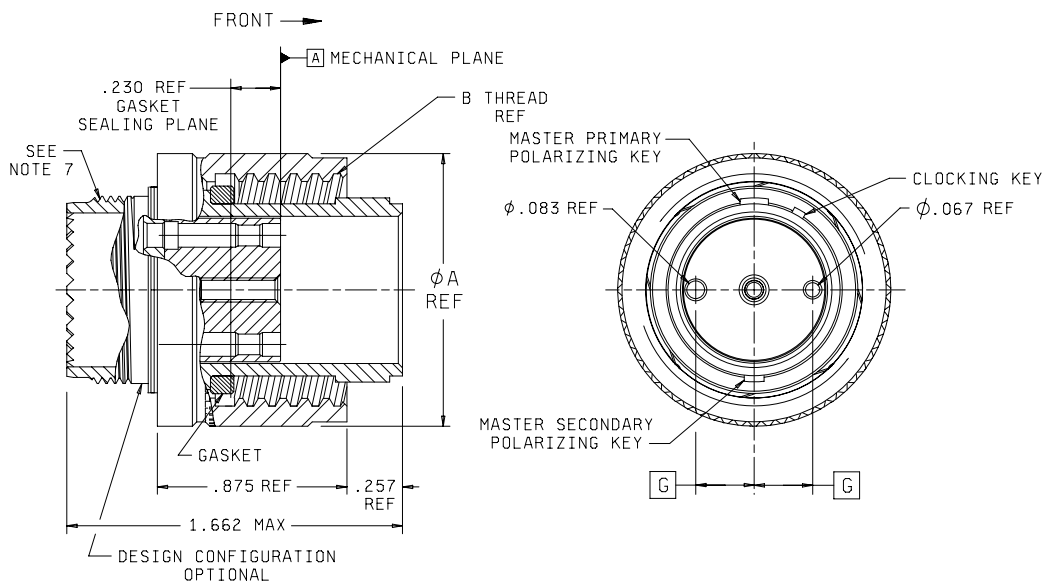
MIL-PRF-64266/2  
25 November 2008

# PERFORMANCE SPECIFICATION SHEET

CONNECTORS, FIBER OPTIC, CIRCULAR, PLUG STYLE,  
MULTIPLE REMOVABLE GENDERLESS TERMINI, SCREW THREADS,  
WITH OR WITHOUT BACKSHELL, ENVIRONMENT RESISTING

This specification is approved for use by all Departments  
and Agencies of the Department of Defense.

The requirements for acquiring fiber optic connectors described herein  
shall consist of this specification sheet and MIL-PRF-64266.



Inches	mm
.010	.25
.015	.38
.067	1.70
.083	2.11
.230	5.84
.257	6.53
.875	22.23
1.662	42.22

FIGURE 1. Plug connector.

Shell size	A dia max	B Thread REF	G
11	1.028 (26.11)	.7500- .1P- .2L-DS	.140 (3.56)
13	1.141 (28.98)	.8750- .1P- .2L-DS	.178 (4.52)
15	1.263 (32.08)	1.062- .1P- .2L-DS	.270 (6.86)
23	1.705 (43.31)	1.5000- .1P- .2L-DS	.400 (10.16)

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Metric equivalents (mm) are in parentheses.
4. Dimensions apply to plated/finished part.
5. Mating key positions and dimensions are shown on figure A-3 of MIL-PRF-64266.
6. Connector plug interface dimensions shall be in accordance with MIL-PRF-64266, figure A-1.
7. Back end connector design for attachment of non-rotatable backshell. Connector backshell accessory interface shall be in accordance with MIL-PRF-64266, figure A-6.
8. The color band shall be yellow and in accordance with EIA-359 for all shell sizes.
9. Insert retention mechanism not shown.
10. For connector insert arrangements and interface dimensions, see appendix B, figures B-1 through B-6 of MIL-PRF-64266.

FIGURE 1. Plug connector - Continued.

## REQUIREMENTS:

Dimensions and configurations: See figure 1 herein and MIL-PRF-64266 appendix A, figure A-1, and figure A-3.

Weight (without termini):

<u>Shell size</u>	<u>Weight (ounces, (gram)), maximum</u>
11	2.0 ounces (56.7g)
13	2.5 ounces (70.875 g)
15	3.0 ounces (85.05 g)
23	4.3 ounces (121.905 g)

Fiber optic cable:

Cable diameter:  $0.315 \pm 0.020$  inch ( $8.00 \pm 0.50$  mm,  $0.425 \pm 0.043$  inch ( $11.80 \pm 1.10$  mm),  $0.563 \pm 0.039$  ( $14.3 \pm 1.00$  mm) or  $.817 \pm .049$  inch ( $20.75 \pm 1.25$  mm).

Protective caps: Each connector shall be supplied with protective caps over the front and rear portions of the connector.

Insert arrangement: See appendix B of MIL-PRF-64266 for desired shell size.

Termini: Genderless. See MIL-PRF-29504/18. For dummy terminus, see MIL-PRF-29504/19. For keyed terminus, see MIL-PRF-29504/20.

Heavy duty backshell: Supplied when specified in the Part or Identifying Number (PIN). Heavy duty backshell shall be in accordance with MIL-PRF-64266/4, MIL-PRF-64266/5, or MIL-PRF-64266/6.

Light duty backshell: Supplied when specified in the PIN. Light duty backshell shall be in accordance with MIL-PRF-64266/7.

EMI retention nut: Supplied when specified in the PIN. EMI retention nut shall be in accordance with MIL-PRF-64266/8.

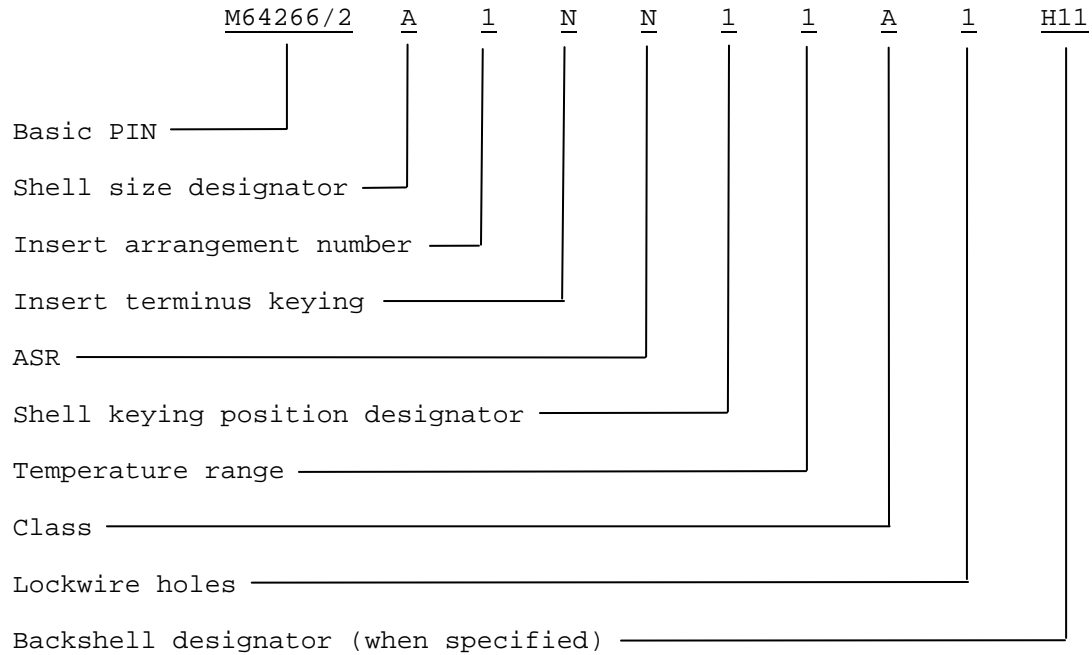
Cleaning procedures: Each shipment of connectors shall include recommended cleaning procedures. The following wording or equivalent is recommended: "To clean, use lint free wipe dampened with alcohol and blow dry with air".

Shell polarization: 1 through 12 keyway positions. See MIL-PRF-64266 appendix A, figure A-3.

MIL-PRF-64266/2

Marking:

Part or Identifying Number (PIN): Marked on flange of receptacle (see table I).



PIN Example: M64266/2A2NN11A2H11 with backshell  
M64266/2A2NN11A2 without backshell

TABLE I. PIN designators.

Shell Size	Shell size designator	Insert arrangement number	Insert terminus keying <u>1</u> /	ASR <u>2</u> /	Shell key position designator
11	B	1, 2	N, K	Y, N	1 through 9 A, B and C
13	C	1	N, K	Y, N	1 through 9 A, B and C
15	D	1, 2	N, K	Y, N	1 through 9 A, B and C
23	H	1	N, K	Y, N	1 through 9 A, B and C

See notes at end of table.

TABLE I. PIN designators - Continued.

Shell Size	Temperature range <u>3</u> /	Class <u>4</u> /	Lockwire holes <u>5</u> /	Backshell designators
11	1, 2	A through G	1, 2	See table II and III.
13	1, 2	A through G	1, 2	See table II and III.
15	1, 2	A through G	1, 2	See table II and III.
23	1, 2	A through G	1, 2	See table II and III.

- 1/ Insert/termini keying applicability: "N" if no provision for MIL-PRF-29504/20 terminus key interface in each insert cavity, "A" if provision for MIL-PRF-29504/20 key interface in each insert cavity is applicable.
- 2/ Unless otherwise specified, the ASR shall be supplied with and installed in the receptacle. Y = Yes (ASR to be supplied); N = No (ASR not supplied).
- 3/ See 1.2.1b of MIL-PRF-64266
- 4/ See 1.2.1a of MIL-PRF-64266
- 5/ 1 = lock wire holes required; 2 = lock wire holes optional

TABLE II. Backshell designators (1st and 2nd positions).

Backshell designator	Receptacle configured with:
H1	Heavy duty straight backshell
H4	Heavy duty 45 degree backshell
H9	Heavy duty 90 degree backshell
L1	Light duty backshell
E1	EMI backshell
Blank	No backshell

TABLE III. Backshell designator (3rd position).

Backshell Designator	Cable diameter range
Backshell dash number from backshell slash sheet	See backshell slash sheet
Blank No backshell	N/A

Mating counterpart: Receptacle connectors specified in MIL-PRF-64266/1 and MIL-PRF-64266/3.

Installation and removal tools: As specified in NAVSEA drawing 8283460. A copy of this document can be obtained at web site:  
<https://fiberoptics.nswc.navy.mil>.

For qualified products listing, quality conformance, and periodic inspections, dummy termini shall be used in all unused cavities.

Referenced documents. In addition to MIL-PRF-64266, this specification sheet references the following documents:

MIL-PRF-64266/1  
MIL-PRF-64266/3  
MIL-PRF-64266/4  
MIL-PRF-64266/5  
MIL-PRF-64266/6  
MIL-PRF-64266/7  
MIL-PRF-64266/8  
MIL-PRF-29504/18  
MIL-PRF-29504/19  
MIL-PRF-29504/20  
NAVSEA drawing 8283460  
EIA-359

Custodians:

Army - CR  
Navy - SH  
Air Force - 85  
DLA - CC

Preparing activity:

DLA - CC

(Project 6060-0168-02)

Review activities:

Navy - AS  
Air Force - 13, 19, 93, 99  
NASA - NA

NOTE: The activities listed above were interested in this document on the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <http://assist.daps.dla.mil>.